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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/526,602	03/16/2000	Yasuharu Suda	54490-Z/JPW/DVD	1592

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01/27/2003

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EXAMINER

RODEE, CHRISTOPHER D

ART UNIT

PAPER NUMBER

1756

DATE MAILED: 01/27/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/526,602

Applicant(s)

SUDA ET AL.

Examiner

Christopher D RoDee

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-- Th MAILING DATE of this communication appears on th cover she t with th correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 21-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 21-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

Claims 21-24 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hou in US Patent 5,358,822.

Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hou in US Patent 5,358,822 as applied to claims 21-24 and 28 above, and further in view of Sato *et al.* in US Patent 3,808,026.

These rejections were first set forth in the Office action mailed 6 December 2000. They were withdrawn in the last Office action because of limitations that required both inorganic particles and a coloring agent subjected to dispersion and mixing (see last Office action, p. 3, bottom). The requirement of the coloring agent was removed from the claim limitations in the recent response. As a result, Hou is reapplied as relevant prior art alone for certain claims and in combination with Sato for other claims, as noted above.

Hou discloses a process of making a liquid toner in the process of Example 2. In the process a thermoplastic polymer (see patent claim 1) and a pigment (e.g., carbon black - an inorganic pigment) are placed in a solvent that is a good solvent for the polymer at high temperatures and a poor solvent at lower temperatures. The polymer and pigment are sonified (i.e., mixed) and heated to a temperature where the polymer is dissolved and then cooled so the polymer precipitates with the pigment. The precipitated polymer particles are removed from the solvent and then redispersed in ISOPAR and mixed with cupric naphthenate along with a steric stabilizer (apparently a dispersant). The reference discloses cupric naphthenate and zirconium octoate (i.e., zirconium octylate) as alternative charge control agents (col. 12, l. 12-20).

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The art as discussed above and as discussed throughout prosecution is pertinent to the claims under consideration. The reference discloses heating of the resin (i.e., polymer) particles in the solvent and suggests that the resin and solvent have the claimed characteristics. See Office actions mailed 25 April 2001 (particularly p. 5) and 17 April 2002. Hou also discloses stirring while heating together with inorganic particles, in this case carbon black. Each of the resin and solvent also inherently has a solubility parameter and suggests the claimed solubility parameter, as discussed in the April 2002 Office action.

The art suggests the claimed process for the reasons of record. Applicants were advised in the last Office action that the combination of inorganic particles and coloring agent previously claimed was the basis for removal of the rejections. Because the combination is no longer claimed, the rejection is properly reapplied. No specific remarks have been presented to show why the previously applied art is not relevant to the instant claims.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D RoDee whose telephone number is 703 308-2465. The examiner can normally be reached on most weekdays from 6 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 703 308-2464. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872-9310 for regular communications and 703 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0661.



**CHRISTOPHER RODEE
PRIMARY EXAMINER**

cdr
January 24, 2003